

9/16/13

Goals: Learn to combine like terms.

Agenda:

- Bell work (6 problems)
- Review Homework p. 50 (10-44 evens)
 - check in all past HW
- Section 1.7 - The distributive Property (combining like terms)
- Begin Homework p. 50-52 (54-72 evens, 76-80 evens, 94)

Section 1.7 Day 2 The Distributive Property

Warm Up:

Grab a sheet and solve the 6 problems:

Terms:	<p>PRODUCTS THAT ARE SEPARATED BY A + OR -</p> <p>COEFFICIENT \rightarrow $6a^2 + 5ab + 3b - 12$ CONSTANT \nwarrow</p> <p><u>TERM</u> <u>TERM</u> <u>TERM</u> <u>TERM</u></p>
Like Terms:	<p>- SAME VARIABLES</p> <p>- SAME EXPONENT</p>
Combining Like Terms:	<p>ADD OR SUBTRACT THE NUMBERS IN FRONT</p>

Section 1.7 Day 2 The Distributive Property

Examples:

$$\begin{array}{r} 13 \\ +5 \\ \hline 18 \end{array}$$

$$\begin{array}{r} 13a + 5a \\ 18a \end{array} \quad \begin{array}{r} 21x - 11x \\ 10x \end{array}$$

$$\begin{array}{r} 21 \\ -11 \\ \hline 10 \end{array}$$

$$\begin{array}{r} 12 \\ 9 \\ \hline 21 \end{array}$$

$$\begin{array}{r} 12b^3 + 12 + 9b^3 - 5 \\ \hline 21b^3 + 12 - 5 \\ \hline \end{array}$$

$$\begin{array}{r} +12 \\ -5 \\ \hline 7 \end{array}$$

$$21b^3 + 7$$

Distributing & Combining Like Terms:

P
E
M
D
A
S

$$\begin{array}{r} 8(3x + 7) + 2x \\ 24x + 56 + 2x \\ \hline 26x + 56 \end{array}$$

Section 1.7 Day 2 The Distributive Property

Examples:

$$3 + 8(st + 3w) + 3st - 15$$

$$\underline{3} + \underline{8st} + \underline{24w} + \underline{3st} - \underline{15}$$

$$11st + 24w - 12$$

Summary:

DISTRIBUTE
-LT

Homework p. 50-52 (54-72 evens, 76-80 evens, 94)

Simplify each expression by combining like terms.

See Problem 1

53. $11x + 9x$

54. $8y - 7y$

55. $5t - 7t$

56. $-n + 4n$

57. $5w^2 + 12w^2$

58. $2x^2 - 9x^2$

59. $-4y^2 + 9y^2$

60. $6c - 4 + 2c - 7$

61. $5 - 3x + y + 6$

62. $2n + 1 - 4m - n$

63. $-7h + 3h^2 - 4h - 3$

64. $10ab + 2ab^2 - 9ab$

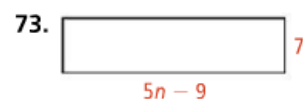
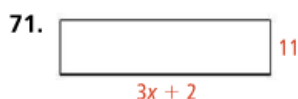
Write a word phrase for each expression. Then simplify each expression.

65. $3(t - 1)$

66. $4(d + 7)$

67. $\frac{1}{3}(6x - 1)$

Geometry Write an expression in simplified form for the area of each rectangle.



- 74. Think About a Plan** You are replacing your regular shower head with a water-saving shower head. These shower heads use the amount of water per minute shown. If you take an 8-min shower, how many gallons of water will you save?

- Which would you use to represent water saved each minute, an expression involving addition or an expression involving subtraction?
- How can you use the Distributive Property to find the total amount of water saved?



Simplify each expression.

75. $6yz + 2yz - 8yz$

76. $-2ab + ab + 9ab - 3ab$

77. $-9m^3n + 4m^3n + 5mn$

78. $3(-4cd - 5)$

79. $12x^2y - 8x^2y^2 + 11x^2y - 4x^3y^2 - 9xy^2$

80. $a - \frac{a}{4} + \frac{3}{4}a$

94. Which expression gives the value in dollars of n nickels?

(F) $0.05n$

(G) $0.05 + n$

(H) $0.5n$

(I) $5n$

SOURCE: National Oceanic and Atmospheric Administration